

TITLE: Extraction of glutamic acid from culture medium;  
purification from fermentation broth by cation-exchange  
chromatography and crystallization, and utilization of  
waste as a fertilizer

AUTHOR: Ter-Sarkesyan E M; Makarenko L N; Petukhova N N; Alieva R O;  
Kochetova E V; Oliinichuk S T; Levandovskii L V

PATENT ASSIGNEE: Res.Inst.Appl.Biochem.Russia

LOCATION: Russia.

PATENT INFO: SU 1637335 20 Apr 1996

APPLICATION INFO: SU 1988-4624850 22 Dec 1988

PRIORITY INFO: SU 1988-4624850 22 Dec 1988

DOCUMENT TYPE: Patent

LANGUAGE: Russian

OTHER SOURCE: WPI: 1997-010403 [01]

AB In a new method, glutamic acid is extracted from  
culture broth with increased efficiency by acidification to pH 0.8-1.2  
with nitric acid, and adsorption on a strong cation-exchanger, followed  
by washing, elution with alkali solution and crystallization to yield a  
product. The spent culture broth, wash water and mother  
liquor from the crystallization stage are combined, neutralized  
with KOH and dried, to yield a potassium and nitrogen fertilizer  
. The method gives increased product yield and utilization of  
waste-products. (3pp)